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·Leadership Series·

THE RECENTRALIZATION OF IT

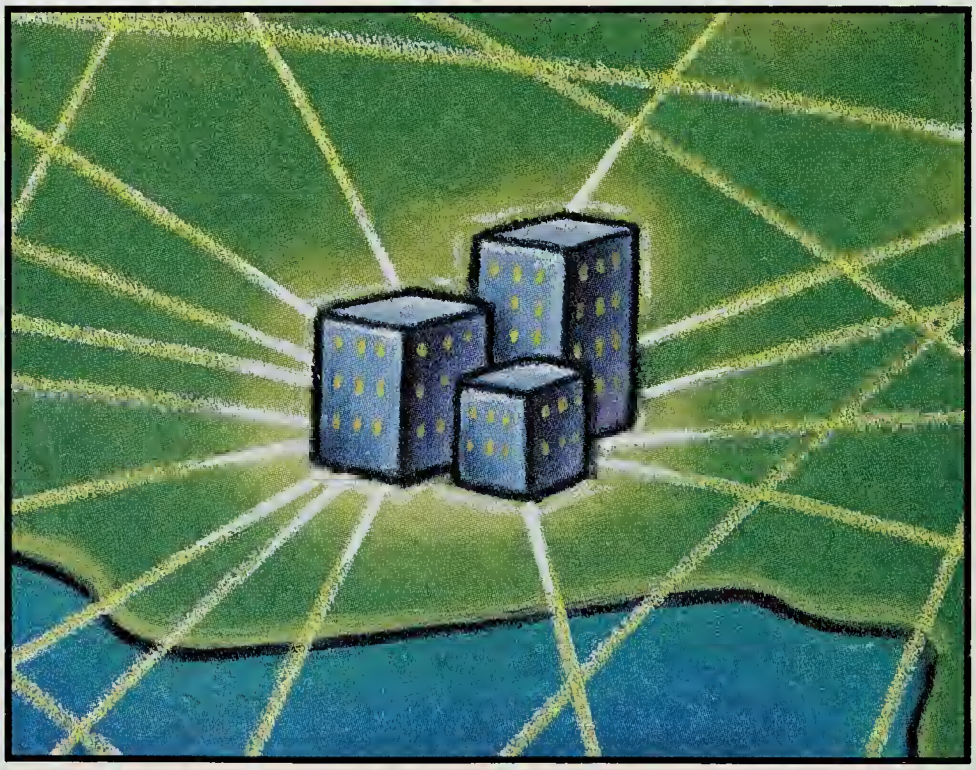
Global competition demands the elimination of all activities that add cost without increasing value. As companies implement massive restructuring to improve customer service and end costly redundancy, they are rediscovering centralized IT — with a few twists.

BY ERNEST M. VON SIMSON

IT'S BEEN FIVE YEARS since "Career Is Over" was first used to describe the fate of the CIO. But a funny thing happened on the way to the gallows. A change in global realities has caused a profound shift in business rules. The new rules emphasize companywide efficiency and even synergy over local empowerment. And instead of being hanged, the chief information officer has been given a new lease on life.

The good news is that the CIO is more essential to the health of the business, more assertive in defining new applications and more influential across organizational divides. The bad news is that the list of challenges is growing. (See "Five challenges for senior IT managers" on facing page.)

The reason for this sea change: Decentralization is waning. A recent study by The Research Board of 25 very large corporations found that fundamental business pressures are forcing corporations to reassess their commitment to a decentralized IT organization. The companies participating in the study span a number of industries, including apparel, automotive, banking, chemicals, construction, consumer products, insurance, petroleum and retail. Sixteen corporations are North American and nine are European; most have significant transborder operations.



Illustrations by Garry Nichols

Restructuring within these companies has led to more central coordination and integrative management that links IT resources between business units and national subsidiaries. Such integration encourages sharing resources, common design of products and components and a single point of contact for customer service. Indeed, 20 of the 25 companies are consolidating computing centers while strengthening central coordination and control over applications development.

This isn't a pendulum swing or management fad. The reasons are more profound.

1. Worldwide competitive pressures severely punish companies whose cost structures are burdened by staffing or resource redundancy. These pressures will intensify as advances in collaborative computing allow most knowledge work to be transferred anywhere in the world, and as improvements in logistics allow most products to be manufactured without regard for proximity to end markets.

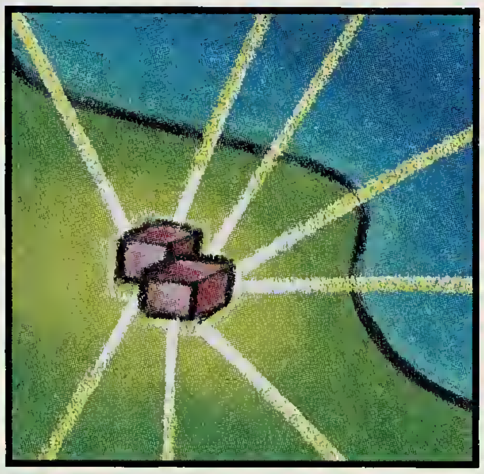
2. Consumer attitudes toward value increasingly emphasize price over status. Sensitivity to price persists, even during economic upturns, perhaps because of long-term declines in real income, perhaps because of the population aging that is evident all over the developed world. These trends mean that purchase decisions increasingly depend on low price and real value rather than brand loyalty. Cost containment through central coordination and resource integration is here to stay.

3. There is the widespread realization that local product variations built to suit specific geographies haven't brought consumers enough value — or their suppliers enough competitive advantage — to be justified. Food manufacturers have discovered that 75% of local variations in product flavoring and packaging are indiscernible by the consumer; an automobile manufacturer draws the same conclusion about engine part substitutions implemented by national subsidiaries. In both cases, local product variations are now considered frivolous because they add cost without adding enough value to inhibit a competitor (unburdened by these

costs) from gaining market share simply by dropping prices.

4. Major retailers and industrial customers insist their suppliers provide consistent sales, billing, service and logistics across all brands, business units and national subsidiaries. This emphasis on presenting a "single face" discourages local variation.

How does a corporation integrate resources, products and services without reintroducing the armies of bureaucrats, volumes of procedures and unacceptably slow market response? (All of which were rightly discarded less than a decade ago.) In part, through new organizational styles and performance metrics that emphasize companywide processes, asset-sharing and product convergence, all lubricated with a healthy measure of centrally controlled information technology.



TWENTY OF 25 COMPANIES STUDIED ARE STRENGTHENING CENTRAL CONTROL OF APPLICATIONS DEVELOPMENT

Industry Trends

As these business factors force centralization, they drive the reintegration of IT. Examples abound in a range of industries as diverse as automotive, banking, consumer products and insurance.

Automobile manufacturers, confronting both excess capacity and the need to accelerate product cycles, must use common components across models. One U.S. automaker has globalized operations so that Europe has responsibility for smaller cars while North America produces larger models and trucks. In a parallel restructuring, the IT function has been globalized as well.

Likewise, a major European auto manufacturer moved early to centralize IT activities. Until 1992, it had independent IT departments for each brand, and smaller IT units in each factory. But following centralization in purchasing and logistics, IT was merged into a single organization. At this point, 48 data centers have been consolidated to six, and central development units organized by function are bringing together applications that resided for decades in individual plants.

This recentralization has two objectives: to save money and to accelerate changes in manufacturing. When each model and plant had its own idiosyncratic applications feeding its own computer center, years could pass before a companywide process improvement trickled through all the organizations, practices and computing platforms. With common applications and computing facilities, a change is now activated as quickly as users are trained.

Banks no longer enjoy protected geographic turf. They face new pressures on margins as competitors' offerings flow easily across international borders once comfortably maintained by state and national regulations.

A major Canadian bank's strategy of operating as a single business to improve customer service has simultaneously driven vigorous consolidation to cut costs and integrate independent units. For example, it is physically centralizing clerical activities from hundreds of small offices to a few large centers. Applications development is being centralized too, in part because common software programs will establish more common work processes and create potential economies of scale.

However, organizational centralization doesn't preclude physical decen-

Five challenges for senior IT managers

1. Cut companywide IT expenditures by large percentages despite the new tasks that must be supported. Fortunately, cost cutting is often concentrated in local units, thereby reducing resistance to central coordination and to the conversion of regional IT departments into competency centers.

2. Assist in the integration of business processes across product lines, functions and geographies. Again, the objective demands a higher degree of central coordination than before.

3. Accelerate the pace of applications development. CEOs often say they are less concerned by the cost of information systems than by the sense that "it's too damn slow," given the hectic pace in business. But be warned: Accelerating cycle time implies radical change in traditional IT development practices, which is neither internally popular nor easy to implement.

4. Replace existing technological infrastructures. It's relatively painless for almost anyone to install a new technology, which may (or may not) find critical mass in terms of usage; it's very difficult to get rid of old technology, whether it still attracts a critical mass of users or just a stubborn handful.

5. Prevent recalcification of the IT organization. In other words, head off the tendency to re-create an inward-looking and arrogant IT bureaucracy. Remember, that's what prompted the push for decentralization and splintering in the past. External benchmarks, very selective outsourcing and metrics focused on business responsiveness are all-important to this task.

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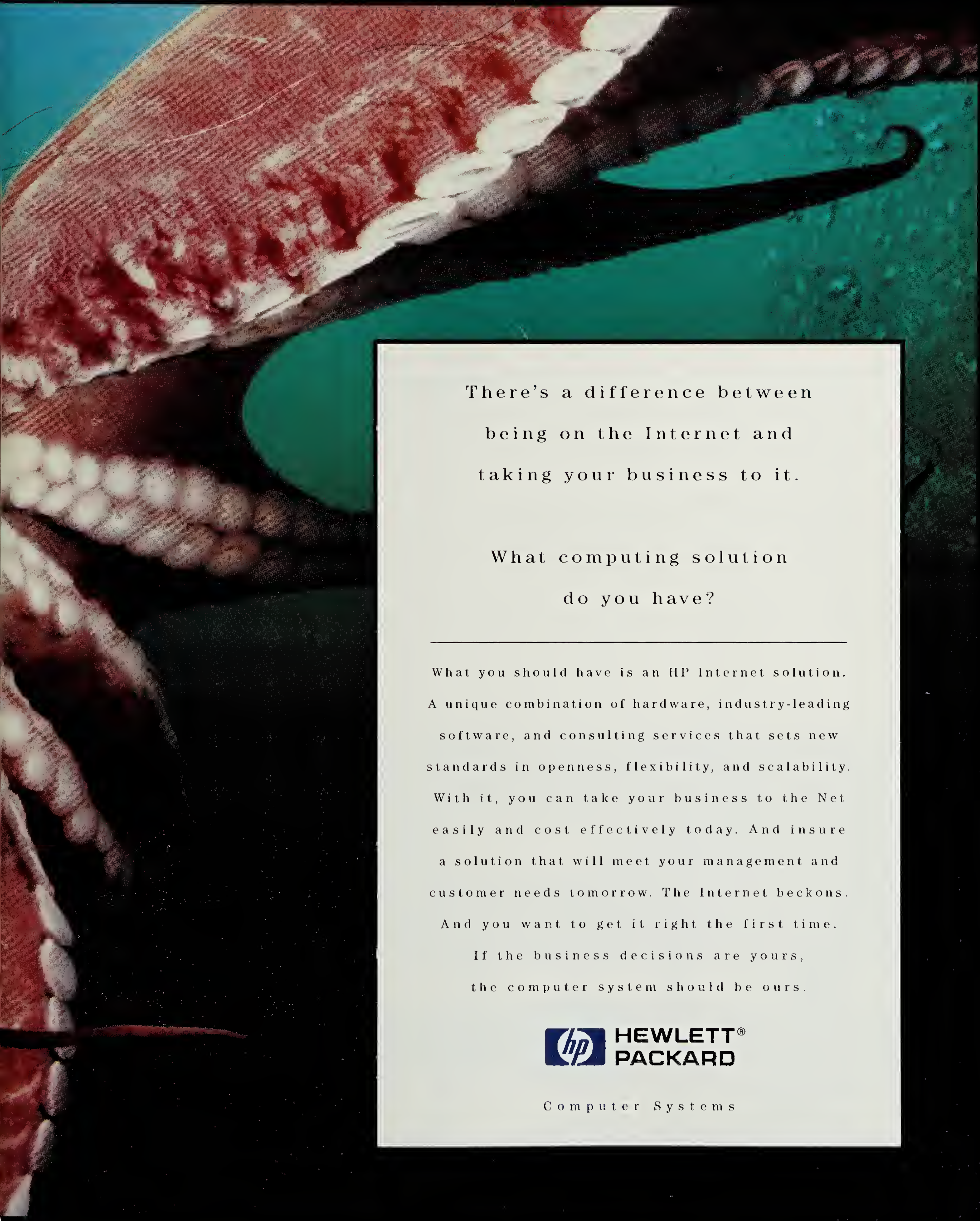

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tralization. Many of the bank's applications development initiatives are being left in their locations but recast as companywide competency centers for a specific application or technology. For example, the bank will turn three large application development centers now dedicated to individual businesses into three specialized competency centers serving the institution as a whole.

Competency centers are often the best way to retain skilled employees and local managers. They also give local users a resident adviser in computing technologies. Both considerations outweigh the dubious benefits of forcing physical consolidation of systems developers who aren't even working on the same projects.

Consumer products companies traditionally favored decentralization to ensure closeness to markets. Business units had considerable autonomy from a distant headquarters, perhaps because they were acquisitions and lacked ties to the overall corporation. Rapid response to consumer preferences is considered more important than operating synergies that might slow the pace.

But time-to-market need not preclude coordinated application development across brands and geographies to reduce IT expenses and promote software reuse. Business units can be close to markets and simultaneously integrate billing and logistics between product categories.

One of the world's top consumer products firms emphasizes global product development to drive down costs by driving out frivolous diversity. National subsidiaries, for example, are not allowed to tweak the soap formula to salute a perceived nuance in local tastes.

There's also much less tolerance for decentralized IT strategies and applications that raised costs and returned only mediocre results. Local managers who were ill-equipped to oversee their IT units invariably gave precedence to local wish lists and budget requests rather than companywide initiatives. Inevitably, IT budgets rose without a corresponding increase in IT utility.

Local reporting links have since been severed. Dispersed IT units have been transformed into competency centers that develop business applications for the region or for the entire company. Thus, the Italian IT center may now be responsible for sales reporting systems for all of Europe.

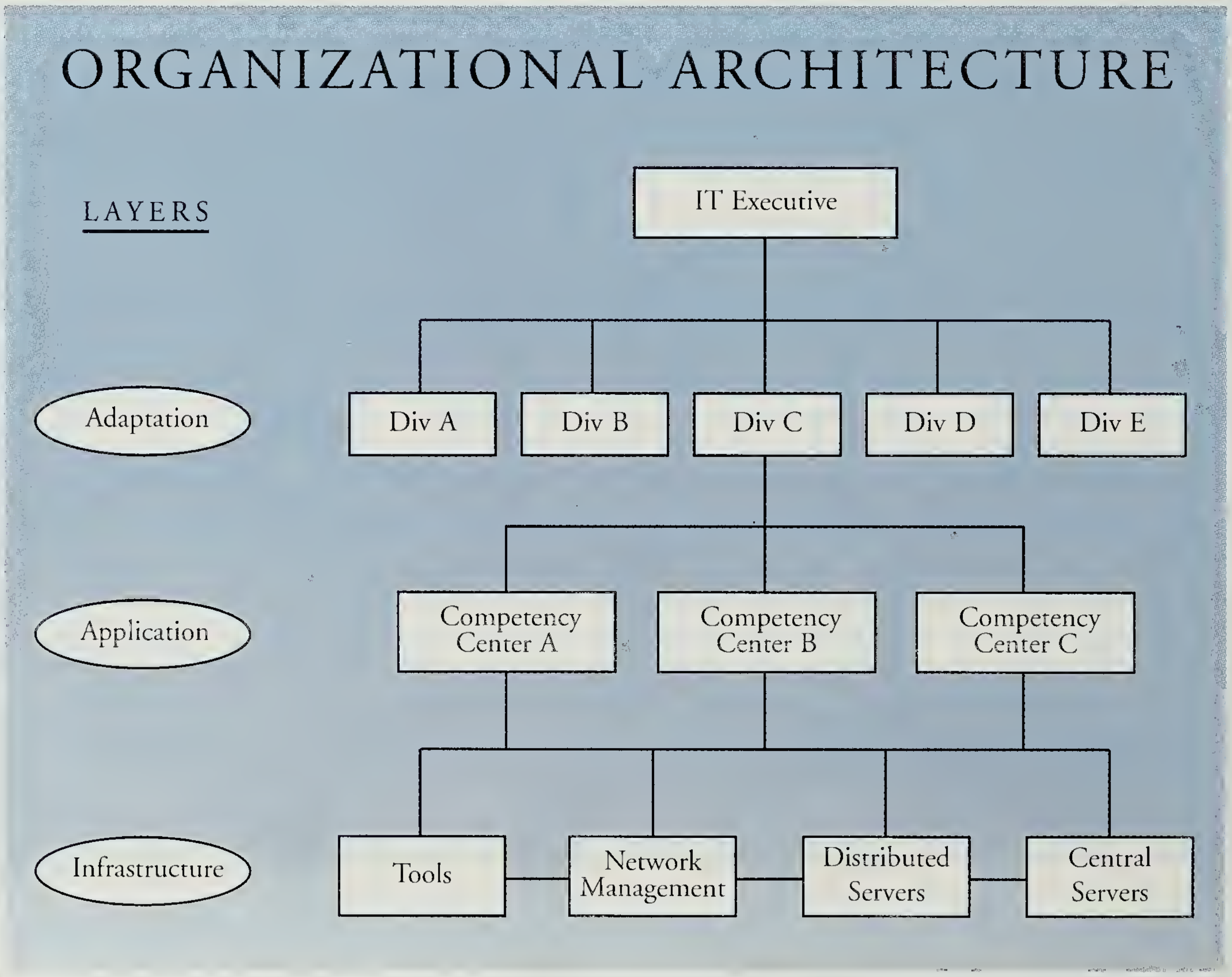
Insurance carriers are also experiencing a variety of pressures to centralize, or centrally coordinate, their processes. For example, property losses from Hurricane Andrew at one large insurance company precipitated a focus on hedging regional exposure by encouraging agents to sell different types of coverage, such as life and property insurance, to a single policyholder.

This goal requires closer coordination of sales commissions and business metrics — all previously the province of separate business divisions — and common IT systems for sales support and billing.

It's also clear that insurers will face ever-greater competition from other regions, or even other countries, as new technologies reduce the need for local offices, agents and claims examiners (just as ATMs reduced the number of neighborhood bank tellers). Locally, bricks and mortar add costs without commensurate benefit. Central information technology can displace bricks and mortar by letting sales and service employees become "locationless."

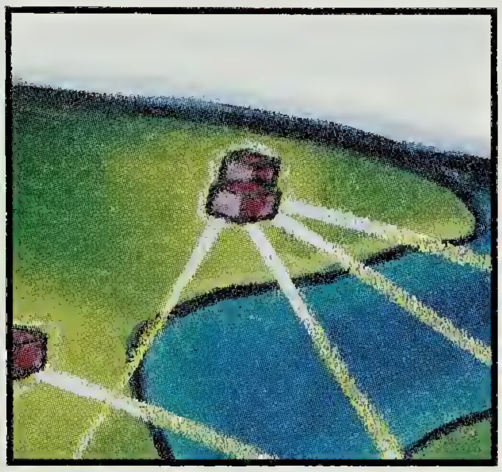
For example, a senior manager at a French insurer questions whether subsidiaries are necessary when technology traverses national boundaries, especially in Europe. He notes that insurance products already are being sold by telephone with astounding success in the U.K.

Claims processing also could become lo-



Source: C. Catalano, The Research Board

cationless. Early tests suggest that 90% of claims reported by telephone immediately after an accident are valid, and that 85% can be settled in only 20 minutes. Payments are lower, partly because quick response reduces quibbling. In short, a rapid response via an automated system can reduce both sales and claims costs, improve customer service, boost profits and may make local subsidiaries obsolete, at least in Europe.



COMPETENCY CENTERS TAP THE TECHNICAL EXPERTISE THAT RESIDES AT PHYSICALLY DECENTRALIZED IT UNITS

New model

Greater IT coordination and the use of common systems requires a new organizational model. (See diagram at left.) A composite of best practices, the model is depicted as an "architecture" because, like a network architecture, it untangles complexities and dependencies, sorting them into three self-contained layers.

Infrastructure Layer. This contains all of the hardware, software, communications and tools necessary to operate the IT utility. Its employees are often computer science graduates; its metrics are strictly cost-based.

Infrastructure costs decline as servers are moved from user areas to data centers, and as data centers are consolidated. This intensifies with declines in communications costs. Savings of 20% of total operations expense are typical. Not even corporations with a cultural preference for decentralization are immune to this trend.

Application Layer. This consists of three to six competency centers, created from units formerly serving specific business activities or national subsidiaries. Each center is made responsible for developing applications that serve a function across all business units, such as new customer acquisition, product development or management of the supply chain.

Competency centers are left in place for two reasons. First, they represent a valuable conglomeration of management skills, technical talent and coordination practices that would be expensive to reproduce. Second, applications groups (unlike computer operations) exhibit few economies of scale. And keeping them dispersed makes the participants less susceptible to the bureaucratic arrogance inescapable among the denizens of one central unit.

Ideally, competency centers are staffed by self-sufficient teams of users, developers and tools technicians; a multidisciplined team is necessary to ensure successful application development. Users are top-notch line managers assigned to IT for 70% of their time. Developers have broader educations than the tool technicians and network troubleshooters in the infrastructure layer.

The self-sufficiency of each center is judged by its ability to reach project decisions without external management reviews. The metric for this layer? Probably a variation of time-to-market measured from when the project begins to the point where the business benefits exceed applications development and start-up costs.

The purpose is to tie users and developers to a common incentive, so neither can be rewarded unless the other succeeds.

Adaptation Layer. This layer is staffed by internal consultants skilled in process change and technology implementation.

While they report to the IT executive, these employees are assigned temporarily to business units to help line management achieve maximum gain from the infrastructure and application layers. For instance, they might suggest business process restructuring using groupware managed at the infrastructure layer combined with an application developed in a competency center.

Clearly, these are not simply people generating new systems requirements. They are business generalists with implementation skills whose strengths are curiosity, analytical aptitude and the ability to communicate. Their metrics: Business results and productivity achievements.

This organizational architecture provides a workable concept for firms grappling with three simultaneous tasks: Integrating global business processes; cutting total infrastructure costs; and eliminating local systems diversity which adds management complexity but brings no value to the customer. ◆

ABOUT THE AUTHOR

Photo by Robbie J. Pope

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